

REMARKS/ARGUMENTS

Claims 26- 54 are pending in this application with claims 26, 28, 33, 37, 40, 42 - 48 and 52 – 54 being amended by this response. Claims 26, 28, 37, 40 and 42-48 are formally amended for purposes of clarity. Claim 47 is formally amended to replace the phrase “transmission of said information independently of transmissions of said audiovisual programme” by “transmission of said recognition elements independently of transmissions of said audiovisual programme”. Support for this amendment can be found throughout the specification and in the wording of claim 35 which state “...and a transmission module for transmitting said recognition elements independently of transmissions of said audiovisual programme...” Support for the other amendments to the claims may also be found throughout the specification and originally filed claims. Consequently, Applicants respectfully submit that no new matter is added by the amendments to the claims.

Objections to the Claims

Claims 26, 28 and 40 are objected to because they contain the typographical errors identified on page 2 of the Office Action. Claims 26, 28, and 40 are formally amended to correct the identified typographical errors. Claim 26 is formally amended to remove the trailing parenthesis and replace the comma at the end of claim 26 with a period. Claim 28 is formally amended to correct the typographical error and replace the word “transitting” with the word “transmitting”.

Claim 40 is amended to replace the phrase “preferably being” with the phrase “being in accordance with Claim 26”. This amendment to the claim is supported by the original set of claims, where claim 15 which included similar features to currently pending claim 40, recites “said recognition unit being in accordance with claim 1”. As original filed claim 1 includes similar features to currently pending claim 26, Applicants respectfully submit that no matter is added by this amendment.

Claim 42 is objected to as being in improper form because a multiple dependent claim should refer to other claims in the alternative. However, claim 42 is not a

multiple dependent claim. Rather, claim 42 is a synchronization system that includes the recognition unit claimed in claim 37. Therefore, claim 42 is formally amended to recite that "the specification unit being in accordance with Claim 37". No new matter is added by this amendment.

In view of the above remarks and amendments to the claims, Applicant respectfully submits that this rejection has been satisfied and should be withdrawn.

Rejection of Claims 33, 42 and 43-45 under 35 U.S.C. 112, second paragraph

Claim 33, 42 and 43 – 45 are rejected under 35 USC 112, second paragraph because the elements identified on page 3 of the Office Action lack antecedent basis. Claims 33, 42 and 43 – 45 are formally amended to provide proper antecedent basis for all features claimed therein.

Claim 33 is rejected because the phrase "in the case of such deletion" lacks antecedent basis. Claim 33 is formally amended to correct a typographical error. The phrase "in the case of such deletion" is replaced with the phrase "in the case of said detecting". Support for this amendment may be found in the originally filed claim 8. Claim 42 is rejected because the phrase "the activation assembly" lacks antecedent basis. Claim 42 is amended to delete the phrase "the activation assembly". Claims 43 – 45 are rejected because the phrase "specification module" lacks antecedent basis. Claims 43 – 45 have been formally amended to replace the phrase "specification module" with the phrase "specification unit" which is claimed in claim 37.

In view of the above remarks and amendments to the claims, Applicants respectfully submit that all instances of improper antecedent basis in claims 33, 42 and 43 – 45 have been removed. Consequently, withdrawal of the rejection of claims 33, 42, and 43 – 45 is respectfully requested.

Double Patent Rejection

Claims 26, 35, 37, 46 – 48 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 23, 34, 47 – 49 of co-pending Application No, 10/521,302. Applicant submits herewith a Terminal Disclaimer in compliance with 37 CFR 1.321. Therefore, Applicant respectfully submits that, in view of the terminal disclaimer being filed, that this rejection has been satisfied and should be withdrawn.

Rejection of Claim 52 – 54 under 35 USC 101

Claims 52 – 54 are rejected under 35 USC 101 as being directed toward non-statutory subject matter. In particular, claims 52 – 54 are not limited to tangible embodiments. Claims 52 – 54 have been amended to recited “A computer readable medium encoded with a computer program” which comprises the steps claimed therein. As claims 52 – 54 refer to the methods claimed in claims 46 – 48, respectively, claims 52 – 54 have been amended to affirmatively recite steps similar to those found in claims 46 – 48. Furthermore, as the specification provides support for a tangible embodiment, i.e. computer readable medium, on page 21, lines 12 – 19, Applicants respectfully submit that the embodiments claimed in amended claims 52 – 54 are limited to a tangible embodiment. Therefore, Applicants respectfully submit that claims 52 – 54 are directed toward statutory subject matter. Thus, it is respectfully submitted that this rejection has been satisfied and should be withdrawn.

Rejection of Claims 26-32 and 34 - 54 under 35 U.S.C. 102(b)

Claims 26-32 and 34 - 54 are rejected under 35 U.S.C. 102(b) as being anticipated by Solvason (WO 02/21840 A2).

Claim 1 provides a recognition unit for recognizing synchronization signals in at least one audiovisual programme received, the audiovisual programme comprising an audiovisual content intended to be broadcast to users and control information. The recognition unit includes a reception module and a recording module, for receiving and recording in a storage space. Recognition elements make it possible to obtain at least

one extracted portion of the content of the audiovisual programme. A reception module receives at least one transmitted stream carrying the audiovisual programme. A detection module detects the synchronization signals in the audiovisual programme received using the recognition elements stored in the storage space, by recognition in the content of the audiovisual programme received, of the extracted portion. A transmission module transmits action instructions in case of detection of the synchronization signals in the audiovisual programme, the instructions being designed so as to trigger at least one action. For the reasons presented below, Applicants respectfully submit that Solvason fails to disclose each feature claimed in claim 1 and therefore does not anticipate the recognition unit of claim 1.

Unlike the claimed arrangement, Solvason provides a method of synchronizing a client with a media signal that includes receiving one or more actions corresponding to the media signal, determining an application for handling the actions, and causing the determined application to handle the action (see Abstract). Thus, Solvason merely describes transmitting actions related to broadcasted content to a user or from a server to clients (Solvason, page 13). In Solvason, a control computer provides a user interface that enables **an operator to define an action** and to associate an action with a particular time code (Solvason, page 9), for example time-codes that identify a particular video frame. Actions have the form of “Get smart: 000100: www.getsmart.com/episode12” that causes a client’s computer’s web-browser to visit the cited web site at the one-hundredth frame of Episode 12 of “Get Smart”. The operator may alternatively also enter a time offset for the action, for example one minute after broadcast begins.

Solvason is fundamentally different from the claimed arrangement which makes it possible to initiate actions from a received audio-visual stream that is completely unintrusive with regard to broadcasters and operators of services while permitting simple and reliable implementation (Application, page 6, lines 11 – 15). Solvason is discussed on page 5, lines 1 – 11 of the present application and the drawbacks of the Solvason system are identified on lines 13 – 16 of page 5. Notably, Solvason fails to

remedy the problem of simplifying operations with respect to synchronization of interactive content with audio/video content. Unlike the claimed arrangement, the synchronization in Solvason still requires an intervention by an operator at suitable moments, or in the form of prior preparation making it possible to trigger a particular actions at desired moment. This is fundamentally different from and not equivalent to the recognition unit of the claimed apparatus which detects synchronization signals without any modification being made to the audiovisual programmes in the data stream. The claimed arrangement advantageously operates by directly analyzing the audiovisual content (such as pictures, sounds, parts of the latter or combinations) broadcast to the users. In contrast, the intrusive methods of Solvason includes intervening on event playlists. This is wholly unlike the claimed apparatus where no modification of these lists (or of the audio-visual stream) is necessary. The claimed arrangement further advantageously provides reduces the risks of broadcasting an interactive service on an audiovisual programme that does not correspond. Specifically, there is a reduced possibility of an error occurring in the display of the stream using the claimed recognition unit because the claimed apparatus performs recognition based on the content, an error has a small possibility of occurring, while with the above methods, these risks. Unlike the claimed apparatus, the Solvason system increases the changes of errors because Solvason requires manipulating identification entities and utilizes a third party for providing information about the content which cannot be verified by the services operator.

The Office Action, on page 6, asserts that Solvason in element 106 of Figure 1 and on page 10, lines 4 – 6, discloses the claimed “recognition unit for recognizing synchronization signals in at least one audiovisual programme received, said audiovisual programme comprising an audiovisual content intended to be broadcast to users and control information, said recognition unit comprising: a reception module and a recording module for receiving and recording in a storage space, recognition elements making it possible to obtain at least one extracted portion of the content of said audiovisual programme”. The Office Action further asserts that because a server can monitor the media signal, extract action definitions, and transmit the actions to

clients, that the claimed features are disclosed. Applicants respectfully disagree. Solvason's action definitions are not equivalent to the claimed "recognition elements". In the claimed arrangement, the recognition elements are used to detect synchronization signals in the received audio visual programme, by recognition in the content of the audio visual programme of the extracted portion. Thus, Solvason fails to disclose or suggest "a detection module for detecting said synchronization signals in said audiovisual programme received, by means of said recognition elements stored in said storage space, by recognition in the content of said audiovisual programme received, of said extracted portion" as claimed in claim 26. Moreover, the claimed arrangement provides for "recognition elements" which are used to detect synchronization signals in a received audiovisual programme and "action instructions" that are transmitted in case of detection of the synchronization signals. Thus, one skilled in the art would recognize that these are two features are independent and have clear and distinct definitions. Recognition elements are extracted portions of a received audio visual programme that are stored in a storage space and that are used to detect synchronization signals in a received audiovisual programme by recognition in the content of the audiovisual programme of the extracted portions. Action instructions are designed to trigger at least one action and are transmitted in case of detection of the synchronization signals.

Unlike the claimed "recognition elements" which are extracted portions of a received audio-visual programme, Solvason's action definitions are actions specifically defined by an operator. Specifically, on page 7, lines 18-19 Solvason provides that "an operator can use the control computer 110 to define 205 actions" and on page 8, lines 15-16 Solvason provides "the control computer can enable an operator to define actions)" and even further on page 9, lines 17-18 which states that "... an operator can define actions". Thus, the action definitions in Solvason are not equivalent to the claimed "recognition elements" which are extracted portions of a received audio visual programme that are stored in a storage space and that are used to detect synchronization signals in a received audiovisual programme by recognition in the content of the audiovisual programme of the extracted portions. Unlike the claimed arrangement,

Solvason requires additional data be inserted by an operator prior to broadcast in order for any content to be read. Thus, Solvason is not equivalent to the claimed arrangement.

The Office Action, on page 6, further asserts that elements 106 of Figure 1 and page 10, lines 9- 11 of Solvason discloses “a detection module for detecting said synchronization signals in said audiovisual programme received, by means of said recognition elements stored in said storage space, by recognition in the content of the audiovisual programme received, of said extracted portion”. Applicants respectfully disagree. There is nothing in the cited section (or elsewhere) of Solvason that discloses or suggests the presence of a detection module that detects synchronization signals in a received audiovisual programme by recognition in the content of the audiovisual programme received, of extracted portions, as is claimed in claim 26. Rather, element 106 of Figure 1 in Solvason is merely a computer able to implement an action that has been previously defined by an operator. For example, Solvason provides that element 106 may include a computer with a web browser (page 5, line 6) that can automatically navigate to a URL (page 5, lines 9-10) or include an application for downloading and installing protection software (page 5, lines 20-23) or an application for presenting to a user of an option to charge an item on TV to a credit card (p.6, lines 4-6). However, unlike the claimed arrangement, any action initiated by the client is performed in response to data that was previously embedded by an operator to be such an indicator. This is NOT equivalent to the claimed arrangement which uses “a detection module for detecting said synchronization signals in said audiovisual programme received, by means of said recognition elements stored in said storage space, by recognition in the content of the audiovisual programme received, of said extracted portion”. Solvason requires a data item be inserted in data stream (see page 9, lines 1 – 10 which state that an operator watches the stream real-time to prepare for appropriate client actions). This is fundamentally different from the claimed arrangement which does not require any information be associated with the audiovisual programme because the claimed arrangement detects “synchronization signals in said audiovisual programme received, by means of said recognition elements stored in said storage space, by recognition in the content of the audiovisual programme received, of said extracted portion”.

Thus, element 106 or page 10, lines 1-11 or elsewhere Solvason fails to disclose or suggests the presence of a detection module that detects synchronization signals in a received audiovisual programme by recognition in the content of the audiovisual programme received, of extracted portions, as is claimed in claim 26. Solvason merely monitors a media signal to extract action definitions which are manually input by an operator. Solvason also fails to disclose or suggest detecting synchronization signals in a received audiovisual programme by recognition in the content of the audiovisual programme received, of extracted portions of the programme. Thus, Solvason fails to anticipate the present claimed arrangement.

Claims 27 – 32 and 34 – 36 are dependent on claim 26 and are considered patentable for the reasons presented above with respect to claim 26. Thus, Applicant respectfully submits that Solvason fails to anticipate claims 27 – 32 and 34 – 36.

Claim 37 provides a specification unit for specifying synchronization signals associated with at least one audiovisual programme, said audiovisual programme comprising an audiovisual content intended to be broadcast to users and control information, and said synchronization signals being intended to be detected in at least one transmitted stream carrying said audiovisual programme and thus to trigger at least one action. The specification unit includes a preparation module for preparing recognition elements making it possible to obtain at least one extracted portion of the content of the audiovisual programme and a transmission module for transmitting the recognition elements independently of transmissions of the audiovisual programme, to at least one recognition unit intended to detect the synchronization signals in the transmitted stream carrying the audiovisual programme, by recognizing the extracted portion in the content of the audiovisual programme. The preparation and transmission modules of the unit are designed respectively to prepare and transmit at least one action timeout lag in case of detection of the synchronization signals and the specification unit being capable of cooperating with the recognition unit. For the reasons presented below Applicants respectfully submit that Solvason fails to disclose or suggest each feature of claim 37 and therefore does not anticipate claim 37.

The Office Action on page 10 asserts that page 6, lines 10-13 of Solvason discloses the claimed “preparation module for preparing **recognition elements** making it possible to obtain at least one extracted portion of the content of said audiovisual programme”. Applicants respectfully disagree. Rather, the cited passage of Solvason merely discusses that a system 100 for synchronizing actions performed by a computer 106 with a TV 104 or radio show can be implemented in various ways. For example, Solvason provides that system 100 includes a control computer 110 that enables an operator to define actions corresponding to a media signal. The action elements in Solvason are NOT equivalent to the claimed recognition elements. Specifically, Solvason’s actions correspond to an URI or a command (page 2, line 5-6). This is fundamentally different from the claimed recognition elements which are transmitted to at least one recognition unit intended and used in detecting synchronization signals associated with at least one audiovisual programme in a transmitted stream carrying the audiovisual programme, by recognizing extracted portion(s) in the content of the audiovisual programme. The URI command described in Solvason is NOT equivalent to the claimed recognition elements. URI commands are not used for detecting synchronization of any type for any purpose and therefore are not “recognition elements” which make it possible to obtain at least one extracted portion of the content of an audiovisual programme as claimed in claim 37.

The Office Action on page 10 further asserts that page 6, lines 14-17 of Solvason provides enabling disclosure of “a transmission module for transmitting said recognition elements independently of transmissions of said audiovisual programme, to at least one recognition unit intended to detect said synchronization signals in said transmitted stream carrying said audiovisual programme, by recognizing said extracted portion in the content of said audiovisual programme” as recited in claim 37. Applicants respectfully disagree. Solvason fails to disclose or suggest the transmission of recognition elements. Rather, Solvason, on page 6 lines 14-17, merely describes the transmission of actions that correspond to an URI or command (page 2, lines 5-6). As discussed above, one skilled in the art would not equate the URI actions of Solvason

with the transmitted recognition elements of the claimed apparatus. Therefore, as Solvason fails to teach each of the features of claim 37 and claim 37 is not anticipated by Solvason.

Claims 38-39 are dependent on claim 37 and are considered patentable for the reasons presented above with respect to claim 37. Therefore, Applicants respectfully submit that claims 38 and 39 are also not anticipated by Solvason.

Claim 40 provides an activation assembly for activation by recognition of synchronization signals in at least one audiovisual programme received, the audiovisual programme comprising an audiovisual content intended to be broadcast to users and control information. The activation assembly includes a recognition unit for recognizing said synchronization signals in at least one transmitted stream carrying the audiovisual programme, by recognition of at least one extracted portion of the content of the audiovisual programme, by means of recognition elements making it possible to obtain said portion and recorded in a storage space. An activation unit designed to trigger at least one action in case of detection of the synchronization signals by the recognition unit, wherein at least one of the recognition and activation units is designed to delay the triggering of said action by at least a determined timeout lag, in case of detection of said synchronization signals. The recognition unit is similar to the one discussed above in claim 26. For the reasons presented below, Applicants respectfully submit that Solvason fails to disclose each feature of claim 40 and therefore does not anticipate claim 40.

The Office Action on page 11 asserts that Solvason, on page 10, lines 1 – 11, discloses “assembly for activation by recognition of synchronization signals in at least one audiovisual programme received, said audiovisual programme comprising an audiovisual content intended to be broadcast to users and control information, the activation assembly comprising: a recognition unit for recognizing said synchronization signals in at least one transmitted stream carrying said audiovisual programme, by recognition of at least one extracted portion of the content of said audiovisual

programme, by means of recognition elements making it possible to obtain said portion and recorded in a storage space” as recited in claim 40. Applicants respectfully disagree. Rather, on page 10, lines 1-11, Solvason mentions that a control computer may embed actions in a media signal, and that server 112 can monitor the signal and extract action definitions that it transmits to clients 106. Alternatively, a server is not needed and client computers 106 monitor themselves media signals and process embedded actions. Extracting an action definition as in Solvason is wholly unlike the claimed arrangement which activates an assembly by recognition of synchronization signals of received audiovisual program by recognizing these signals in an extracted portion of the programme using recognition elements. Solvason fails to contemplate using recognition elements or any equivalent feature. Unlike the claimed arrangement, Solvason describes extracting action definitions from a media signal in the processing of embedded actions. This is NOT equivalent to recognition of synchronization signals in a transmitted stream of extracted portions of an audiovisual programme by means of recognition of at least one extracted portion of the content of the audiovisual programme. The monitoring performed by Solvason is not equivalent to the operation of the claimed recognition unit.

The Office Action on page 11 further asserts that page 9, lines 11-24 of Solvason discloses the claimed “activation unit designed to trigger at least one action in case of detection of said synchronization signals by the recognition unit”. Applicants respectfully disagree. The cited section of Solvason describes a control computer that provides a user interface that allows an operator to define actions and associate actions with a time-code, for example time-codes identifying a particular video-frame; or associate an action with a time-offset, e.g. one minute after broadcast starts. This operator defined and controlled association fails to disclose or suggest triggering any action in the case of detection of said synchronization signals by the recognition unit as in the claimed arrangement. As discussed above Solvason fails to contemplate detecting synchronization signals in any manner. Therefore, as each feature of claim 40 is neither disclosed nor suggested by Solvason, claim 40 is not anticipated by Solvason.

Claim 41 is dependent on claim 40 and is considered patentable for the reasons presented above with respect to claim 40. Therefore, Applicants respectfully submit that claim 41 is not anticipated by Solvason.

Claim 42 provides a synchronization system comprising a specification unit for specifying synchronization signals associated with at least one audiovisual programme, the audiovisual programme comprising an audiovisual content intended to be broadcast to users and control information. A recognition unit is provided for recognizing the synchronization signals in at least one transmitted stream carrying the audiovisual programme, by recognition of at least one extracted portion of the content of the audiovisual programme, in the audiovisual programme received. An activation unit is designed to trigger at least one action in case of detection of the synchronization signals by the recognition unit, the recognition unit and the activation unit forming an activation assembly, wherein the specification unit is designed to prepare and transmit to the recognition unit recognition elements making it possible to obtain the extracted portion, as well as at least one action timeout lag in case of detection of the synchronization signals, and in that the activation assembly is capable of delaying the triggering of the action according to the lag transmitted, in case of detection of the synchronization signals. The specification unit includes features similar to those described in claim 37. For the reasons presented below, Applicants respectfully submit that Solvason fails to disclose each feature claimed in claim 42 and therefore does not anticipate claim 42.

The Office Action, on page 12, asserts that page 6, lines 10 – 13 of Solvason discloses the claimed “synchronization system comprising: a specification unit for specifying synchronization signals associated with at least one audiovisual programme, said audiovisual programme comprising an audiovisual content intended to be broadcast to users and control information”. Applicants respectfully disagree. The cited passage of Solvason merely discusses that a system 100 for synchronizing actions performed by a computer 106 with a TV 104 or radio show can be implemented in various ways; for example, the system 100 includes a control computer 110 that enables

an operator to define actions corresponding to a media signal. The operator controlled control computer in Solvason is not equivalent to “a specification unit for specifying synchronization signals associated with at least one audiovisual programme, said audiovisual programme comprising an audiovisual content intended to be broadcast to users and control information” as claimed by claim 42. Unlike the claimed arrangement which specifies synchronization signals, the cited passage of Solvason is about specifying actions. Synchronization signals as in the claimed arrangement are NOT actions manually specified by an operator in Solvason. Synchronization signals, as claimed by claim 42, are used to trigger actions in case of detection of the signals. No equivalent feature is disclosed or suggested by Solvason.

The Office Action further asserts that, page 10, lines 1 – 11 of Solvason discloses “a recognition unit for recognizing said synchronization signals in at least one transmitted stream carrying said audiovisual programme, by recognition of at least one extracted portion of the content of said audiovisual programme, by means of recognition elements making it possible to obtain said portion and recorded in a storage space” as recited in claim 42. Applicants respectfully disagree. Rather, the section relied on in the Office Action, Solvason describes a control computer that may embed actions in a media signal, and that server 112 can monitor the signal and extract action definitions that it transmits to clients 106. Alternatively, a server is not needed and client computers 106 monitor themselves media signals and process embedded actions. This is fundamentally different from the claimed arrangement which provides a synchronization system with a recognition unit for recognizing synchronization signals in a transmitted stream carrying an audiovisual programme. The only extraction performed in Solvason is extracting action definitions from a media signal. Extracting action is NOT equivalent to recognition of synchronization signals in a transmitted stream of an extracted portion of an audiovisual programme by means of recognition elements.

The Office Action further asserts that page 9, lines 11 – 24 of Solvason discloses “an activation unit designed to trigger at least one action in case of detection of said synchronization signals by the recognition unit, the recognition unit and the

activation unit forming an activation assembly". Applicants respectfully disagree. At page 9, lines 11-24, Solvason merely mentions that a control computer that provides a user interface that allows an operator to define actions and associate these actions with a time-code, for example time-codes identifying a particular video-frame; or associate an action with a time-offset, e.g. one minute after broadcast starts. A user interface allowing an operator to define actions and associate these actions with a time-code or a time-offset as described in Solvason is NOT equivalent to an activation unit designed to trigger at least one action in case of detection of a synchronization signal by a recognition unit, the recognition unit and the activation unit forming an activation assembly" as claimed by claim 42. Specifically, the detection of the synchronization signals is performed using recognition elements in an extracted portion of the audiovisual programme. This feature is not contemplated by Solvason. Therefore, as Solvason fails to disclose or suggest each feature of claim 42, Applicants respectfully submit that claim 42 is not anticipated by Solvason.

Claims 43 – 45 are considered patentable for the reasons presented above with respect to claims 26, 37, 40 and 42.

Claim 46 provides a method of activation by recognition of synchronization signals in at least one audiovisual programme received, the audiovisual programme comprising an audiovisual content intended to be broadcast to users and control information. The method includes the reception of at least one transmitted stream carrying said audiovisual programme and the detection of the synchronization signals in the audiovisual programme received by means of recognition elements making it possible to obtain at least one extracted portion of the content of the audiovisual programme and stored in a storage space, by recognition of the extracted portion, in the content of the audiovisual programme. The method further includes triggering of at least one action in case of detection of the synchronization signals in the audiovisual programme, wherein the triggering of the action is delayed by at least one determined lag in case of detection of said synchronization signals. The recognition method is implemented by means of an activation assembly. For the reasons presented below,

Applicants respectfully submit that Solvason fails to disclose or suggest each feature claimed in claim 46 and therefore does not anticipate claim 46.

The Office Action, on page 14, asserts that Solvason, at page 10, lines 1-11, discloses “detection of said synchronization signals in said audiovisual programme received by means of recognition elements making it possible to obtain at least one extracted portion of the content of said audiovisual programme and stored in a storage space, by recognition of said extracted portion, in the content of said audiovisual programme”. Applicants respectfully disagree. Rather, page 10, lines 1-11, Solvason merely mentions that a control computer may embed actions in a media signal, and that server 112 can monitor the signal and extract action definitions that it transmits to clients 106. Alternatively, a server is not needed and client computers 106 monitor themselves media signals and process embedded actions. Monitoring signals as in Solvason is fundamentally different from detecting synchronization signals in an audiovisual programme received by means of recognition elements making it possible to obtain at least one extracted portion of the content of the audiovisual programme and stored in a storage space, by recognition of the extracted portion, in the content of the audiovisual programme.

Unlike the claimed arrangement, Solvason describes extracting action definitions from a media signal in processing of embedded actions. The action definitions in Solvason are NOT equivalent to the claimed recognition elements that are used to obtain an extracted portion of the programme for detecting synchronization signals. Solvason fails to disclose or suggest the detection of synchronization signals in an audiovisual programme received by means of recognition elements making it possible to obtain at least one extracted portion of the content of the audiovisual programme and stored in a storage space, by recognition of the extracted portion, in the content of the audiovisual programme. In contrast, Solvason merely describes monitoring a media signal for extracting actions which is not equivalent to the synchronization signals of the claimed arrangement which are used to trigger actions in case of detection.

The Office Action further asserts that, on page 9, lines 17-24, Solvason discloses “triggering of at least one action in case of detection of said synchronization signals in said audiovisual programme”. Applicants respectfully disagree. Rather, the cited section of Solvason merely describes that an action may be associated, by an operator, with a time code. Association of a time code with an action by an operator is not equivalent to **triggering** of at least one action in case of detection of said synchronization signals in said audiovisual programme as claimed by claim 46.

The Office Action further asserts that element 106 of Figure of Solvason provides enabling disclosure of the “recognition method being implemented by means of an activation assembly”. Applicants respectfully disagree. Figure 1 of Solvason shows an example of a system for synchronizing actions using an operator to manually associate actions with a stream of data. This is fundamentally different from the claimed method of activation by recognition of synchronization signals received in at least one audiovisual programme, where the recognition method is implemented by means of an activation assembly. The activation assembly is considered patentable in view of the remarks presented above with respect to claim 40. Therefore, as each feature of claim 46 is neither disclosed nor suggested by Solvason, Applicant respectfully submits that Solvason does not anticipate claim 46.

Claim 47 provides a method of specifying synchronization signals associated with at least one audiovisual programme, the audiovisual programme comprising an audiovisual content intended to be broadcast to users and control information, the synchronization signals being intended to be detected in at least one transmitted stream carrying said audiovisual programme and thus to trigger at least one action. The method of specification includes the preparation of recognition elements making it possible to obtain at least one extracted portion of the content of said audiovisual programme and the transmission of said recognition elements independently of transmissions of the audiovisual programme, for detection of the synchronization signals in the transmitted stream carrying the audiovisual programme, by recognition of the extracted portion in the content of said audiovisual programme. The method further includes the

transmission of at least one action timeout lag in case of detection of the synchronization signals independently of transmissions of the audiovisual programme. The specification method is implemented by means of a specification unit. For the reasons presented below, Applicants respectfully submit that Solvason fails to disclose or suggest the features of claim 47 and therefore does not anticipate Claim 47.

The Office Action asserts that Solvason, on page 6, lines 10-13, discloses the claimed “[m]ethod of specifying synchronization signals associated with at least one audiovisual programme, said audiovisual programme comprising an audiovisual content intended to be broadcast to users and control information, said synchronization signals being intended to be detected in at least one transmitted stream carrying said audiovisual programme and thus to trigger at least one action”. Applicants respectfully disagree. Rather, and contrary to the assertion in the Office Action, the cited passage of Solvason merely discusses that a system 100 for synchronizing actions performed by a computer 106 with a TV 104 or radio show which can be implemented in various ways. For example, in Solvason, the system 100 includes a control computer 110 that enables an operator to define actions corresponding to a media signal. However, the method claimed in claim 47 provides the specification of synchronization signals associated with audiovisual programme(s), that are intended to be detected in at least one transmitted stream carrying an audiovisual programme, and to trigger at least one action. Unlike the claimed arrangement, Solvason defines actions corresponding to a media signal. Defining actions for association with a media signal is not equivalent to the claimed specification of synchronization signals which are used to synchronize content with a audiovisual programme. The actions in Solvason are defined on page 2, lines 5-6, which state that actions correspond to an URI or a command. Thus, the actions in Solvason are not equivalent to the claimed synchronization signals because the “synchronization signals [are] intended to be detected in at least one transmitted stream carrying said audiovisual programme and thus to trigger an action”. In contrast, the actions in Solvason correspond to a command. Thus, in no way, Solvason discloses or suggests in the cited passage (or elsewhere) the claimed “[m]ethod of specifying synchronization signals associated with at least one audiovisual programme, said

audiovisual programme comprising an audiovisual content intended to be broadcast to users and control information, said synchronization signals being intended to be detected in at least one transmitted stream carrying said audiovisual programme and thus to trigger at least one action”.

The Office Action further asserts that Solvason, on page 6, lines 10-13, discloses the “preparation of recognition elements making it possible to obtain at least one extracted portion of the content of said audiovisual programme”. Applicants respectfully disagree. As discussed above, the cited passage merely discusses that a system 100 for defining actions performed by a computer 106 using a control computer 110 that enables an operator to define actions corresponding to a media signal. However, the actions defined by the operator in Solvason are NOT equivalent to the “recognition elements” prepared in the claimed method. As defined by Solvason, actions are an URI or a command (p.2 lines 5-6). This is fundamentally different from and not equivalent to the recognition elements which allow detection of synchronization signals in a transmitted stream by recognition of extracted portion(s) of the content of an audiovisual programme. Thus, Solvason fails to disclose or suggest the present claimed feature.

The Office Action further asserts that Solvason, on page 6, lines 14-17, discloses the “transmission of said recognition elements independently of transmissions of said audiovisual programme, for detection of said synchronization signals in said transmitted stream carrying said audiovisual programme” as in the present claimed arrangement. Applicants respectfully disagree. Rather, the cited section of Solvason merely describes the transmission of actions that correspond to an URI or command (p.2 lines 5-6). Nothing in the cited section of Solvason (or elsewhere) is there enabling disclosure of the transmission of recognition elements in any manner and certainly nothing that discloses or suggest the that “recognition elements” are transmitted “independently of said audiovisual programme, for detection of said synchronization signals in said transmitted stream carrying said audiovisual programme” as in the claimed arrangement. Unlike the claimed arrangement, the

actions in Solvason are a URI or a command (p.2 lines 5-6). In contrast, the claimed recognition elements allow for detection of synchronization signals in a transmitted stream by recognition of extracted portion(s) of the content of an audiovisual programme. Thus, Solvason neither discloses nor suggests, the “transmission of said recognition elements independently of transmissions of said audiovisual programme, for detection of said synchronization signals in said transmitted stream carrying said audiovisual programme” as in the claimed arrangement. Thus, as Solvason fails to disclose each feature of claim 47, Applicants respectfully submit that claim 47 is not anticipated by Solvason.

Claim 48 provides a synchronization method. The method include a step of specifying synchronization signals associated with at least one audiovisual programme, the audiovisual programme comprising an audiovisual content intended to be broadcast to users and control information, in which recognition elements making it possible to obtain at least one extracted portion of the content of the audiovisual programme are specified for said detection. A step of detecting the synchronization signals is further provided wherein at least one transmitted stream carrying the audiovisual programme, in which the synchronization signals are detected in the audiovisual programme received, by recognition of the extracted portion in the content of the audiovisual programme. The method further includes a step of triggering at least one action in case of detection of the synchronization signals, wherein the triggering of the action is delayed by at least one determined lag in case of detection of the synchronization signals. The synchronization method is implemented by a synchronization system. For the reasons presented below, Applicants respectfully submit that Solvason fails to disclose or suggest each feature of claim 48 and therefore does not anticipate claim 48.

The Office Action asserts that, page 6, lines 10-13 of Solvason discloses “a step of specifying synchronization signals associated with at least one audiovisual programme, said audiovisual programme comprising an audiovisual content intended to be broadcast to users and control information, in which recognition elements making it

possible to obtain at least one extracted portion of the content of said audiovisual programme are specified for said detection” as recited in claim 48. Applicants respectfully disagree. As discussed above with respect to the rejection of claim 47, the cited passage merely discusses that a system 100 for synchronizing actions performed by a computer 106 with a TV 104 that includes a control computer 110 that enables an operator to define actions corresponding to a media signal. However, the actions of Solvason are not equivalent to the claimed “synchronization signals”. Solvason’s actions are an URI or a command (p.2 lines 5-6) which are wholly unlike the claimed synchronization signals which are detected in a transmitted audiovisual programme by recognition of portions of the content of the programme. Additionally, in the claimed method “synchronization signals” are employed in the “step of triggering at least one action in case of detection of said synchronization signals”. The actions defined by the control computer in Solvason fail to provide an equivalent feature or operation. Thus, Solvason fails to disclose or suggest “a step of specifying synchronization signals associated with at least one audiovisual programme, said audiovisual programme comprising an audiovisual content intended to be broadcast to users and control information, in which recognition elements making it possible to obtain at least one extracted portion of the content of said audiovisual programme are specified for said detection” as recited in claim 48.

The Office Action further asserts that Solvason, on page 10, lines 1-11, discloses “a step of detecting said synchronization signals in at least one transmitted stream carrying said audiovisual programme, in which said synchronization signals are detected in said audiovisual programme received, by recognition of said extracted portion in the content of said audiovisual programme” as recited in claim 48. Applicants respectfully disagree. Rather, the cited section of Solvason describes that a control computer may embed actions in a media signal, and that server 112 or a client computer can monitor the signal and extract action definitions from the signal. This is fundamentally different from the claimed “step of detecting said synchronization signals in at least one transmitted stream carrying said audiovisual programme, in which said synchronization signals are detected in said audiovisual programme

received, by recognition of said extracted portion in the content of said audiovisual programme". Unlike the claimed arrangement, Solvason discusses extracting of action definitions from a media signal in processing of embedded actions. This is fundamentally different from the claimed arrangement which provides for detecting synchronization signals.

The Office Action further asserts that Solvason discloses, at page 9, lines 11-24, "triggering of at least one action in case of detection of said synchronization signals in said audiovisual programme" as recited in claim 48. Applicants respectfully disagree. Contrary to the assertion in the Office Action, the cited section of Solvason merely describes that a control computer may provide a user interface that allows an operator to define actions and associate these actions with a time-code, for example time-codes identifying a particular video-frame; or associate an action with a time-offset, e.g. one minute after broadcast starts. Providing a user interface allowing an operator to define actions and associate these actions with a time-code or a time-offset, as in Solvason is NOT equivalent to "triggering of at least one action in case of detection of a synchronization signal in said audiovisual programme" as claimed by claim 48. Solvason fails to contemplate triggering an action for any purpose. Therefore, as each feature of claim 48 is neither disclosed nor suggested by Solvason, Applicants respectfully submit that claim 48 is not anticipated by Solvason.

Claim 49 is dependent on claim 46 and is considered patentable for the reasons presented above with respect to claim 46. Therefore, Applicants respectfully submit that claim 49 is not anticipated by Solvason.

Claim 50 is dependent on claim 47 and is considered patentable for the reasons presented above with respect to claim 47. Therefore, Applicants respectfully submit that claim 50 is not anticipated by Solvason.

Claim 51 is dependent on claim 48 and is considered patentable for the reasons presented above with respect to claim 48. Therefore, Applicants respectfully submit that claim 51 is not anticipated by Solvason.

Claims 52 – 54 are considered patentable for the reasons presented above with respect to claims 46 – 48. Therefore, Applicants respectfully submit that claims 52 - 54 are not anticipated by Solvason.

In view of the above remarks and amendments to the claims it is respectfully submitted Solvason fails to disclose or suggest each feature claimed in claims 1 – 32 and 34 – 54. Thus, Applicants respectfully submit that claims 1 – 32 and 34 – 54 are not anticipated by Solvason. It is thus, further respectfully submitted that this rejection is satisfied and should be withdrawn.

Rejection of Claim 33 under 35 U.S.C. 103(a)

Claim 33 is rejected under 35 U.S.C. 103(a) as being unpatentable over Solvason (WO 02/21840 A2) in view of Blackketter et al. (US 2002/0056129 A1)

Claim 33 is dependent on claim 26 and is considered patentable for the reasons presented above with respect to claim 26. Blackketter alone or in combination with Solvason fails to disclose or suggest “a reception module and a recording module, for receiving and recording in a storage space, recognition elements making it possible to obtain at least one extracted portion of the content of said audiovisual programme” as recited in claim 26. Blackketter (with Solvason) also fails to disclose or suggest “a detection module for detecting said synchronization signals in said audiovisual programme received, by means of said recognition elements stored in said storage space, by recognition in the content of said audiovisual programme received, of said extracted portion” and “a transmission module for transmitting action instructions in case of detection of said synchronization signals in said audiovisual programme, said instructions being designed so as to trigger at least one action” as recited in claim 26.

In view of the above remarks and amendments to the claims, Applicant respectfully submits that Blackketter when taken alone or in combination with Solvason fails to make the present invention as claimed in claim 26 unpatentable. As

claim 33 is dependent on claim 26, Applicants further respectfully submit that claim 33 is patentable over Solvason in view of Blacketter. It is further respectfully submitted that this rejection has been satisfied and should be withdrawn.

The applicant respectfully submits, in view of the above arguments, that the all arguments made by the Examiner have been addressed and this rejection should be withdrawn. Therefore, the applicant respectfully submits that the present claimed invention is patentable.

No additional fee is believed due. However, if a fee is due, please charge the additional fee to Deposit Account 07-0832.

Respectfully submitted,

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August 28, 2009